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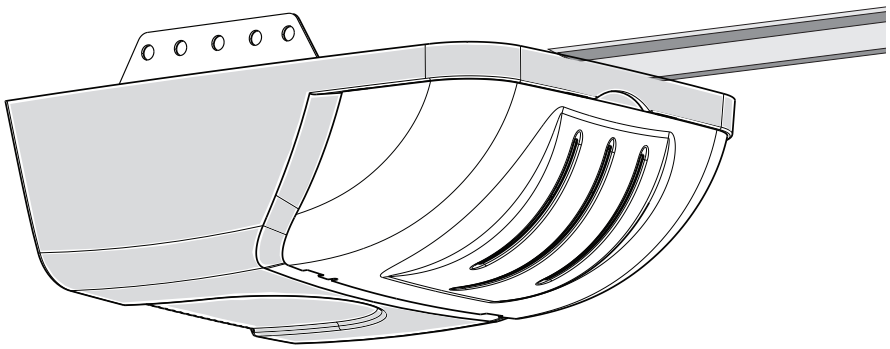

MT60

Sectional and Tilt Garage Door Opener

Installation and Operating Instructions

Owners Copy: Please keep these instructions for future reference

This manual contains IMPORTANT SAFETY information
DO NOT PROCEED WITH THE INSTALLATION BEFORE READING THOROUGHLY

N2966

START BY READING THESE IMPORTANT SAFETY INSTRUCTIONS

WARNING

- **Failure to comply with the following instructions may result in serious personal injury or property damage.**
- **Read and follow all instructions carefully.**
- **The garage door opener is designed and tested to offer safe service provided it is installed and operated in strict accordance with the instructions in this manual.**

These safety alert symbols mean *WARNING* : A possible risk to personal safety or property damage exists.

Keep garage door balanced. Do not let the garage door opener compensate for a binding or sticking garage door. Sticking, binding or unbalanced doors must be repaired before installing this opener.

Do not wear rings, watches or loose clothing while installing or servicing a garage door opener.

Frequently examine the door installation, in particular cable, springs and mountings for signs of wear, damage or imbalance. Do not use if repair or adjustment is needed since springs and hardware are under extreme tension and a fault can cause serious personal injury.

To avoid serious personal injury from entanglement, ***remove all ropes, chains and locks connected to the garage door*** before installing the door opener.

Installation and wiring must be in compliance with your local building and electrical codes.

The safety reverse system test is very important. Your garage door ***MUST*** reverse on contact with a 40mm obstacle placed on the floor. Failure to properly adjust the opener may result in serious personal injury from a closing garage door. ***Repeat the test once a month and make any necessary adjustments.***

This opener should not be installed in a damp or wet space exposed to weather.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

The Protector System™ must be used for all installations where the closing force as measured on the bottom of the door is over 400N (40kgf). Excessive force will interfere with the proper operation of the Safety Reverse System or damage the garage door.

After installation, ensure that the parts of the door do not extend over public footpaths or roads.

Install the wireless wall control (or any additional wall control) ***in a location where the garage door is visible, at a height of at least 1.5m and out of the reach of children. Do not allow children to operate push button(s) or transmitter(s).*** Serious personal injury from a closing garage door may result from misuse of the opener.

Permanently fasten the Warning Labels in Prominent Places, adjacent to Wall Controls and manual release mechanisms as a reminder of safe operating procedures.

Activate opener only when the door is in full view, free of obstructions and the opener is properly adjusted. No one should enter or leave the garage while the door is in motion.

Do not allow children to play near the door, or door controls.

Disconnect electric power to the garage door opener before making repairs or removing covers.

KEEP THESE INSTRUCTIONS

Warning: If your garage has no service entrance door, a CM1702 outside quick release must be installed. This accessory allows manual operation of the garage door from outside in case of power failure.

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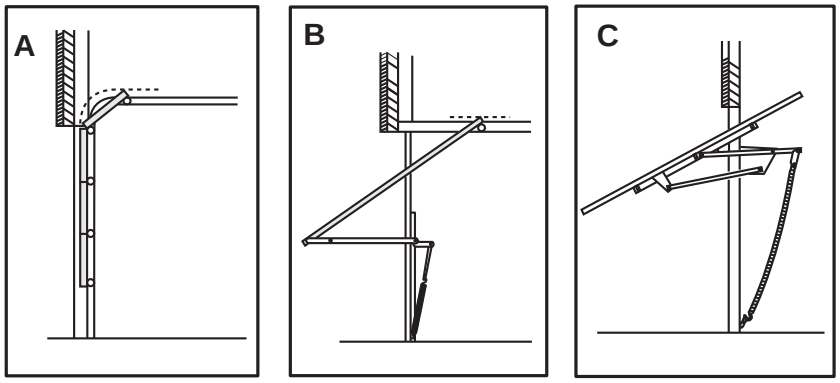
BEFORE YOU BEGIN:

1. Look at the wall or ceiling above the garage door. The header bracket ***must*** be securely fastened to structural supports.
2. Do you have a finished ceiling in your garage? If so, a support bracket and additional fastening hardware (not supplied) may be required.
3. Do you have an access door in addition to the garage door? If not, model CM1702 Outside Quick Release Accessory is required. This accessory allows manual operation of the garage door from outside in case of power failure.
4. Complete the following test to make sure your garage door is balanced and is not sticking or binding:
   - Lift the door about halfway. Release the door. If balanced, it should stay in place, supported entirely by its springs.
   - Raise and lower the door to see if there is any binding or sticking. If your door binds, sticks, or is out of balance, call a trained door technician.

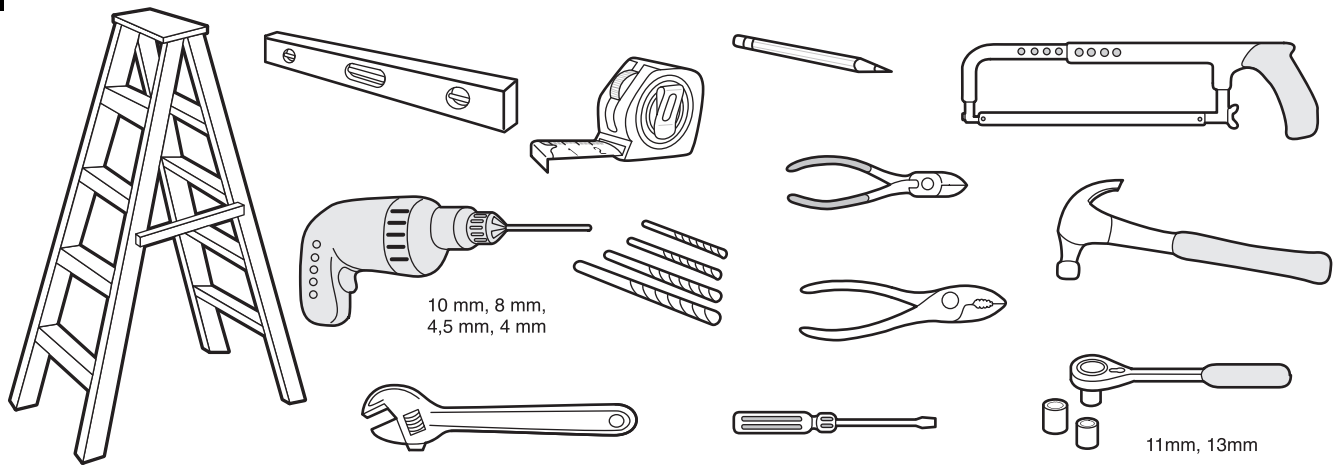
1 *DOOR TYPES*

A. Sectional Door with curved track
B. One-Piece Door with Horizontal Track Only
C. One-Piece Door without track

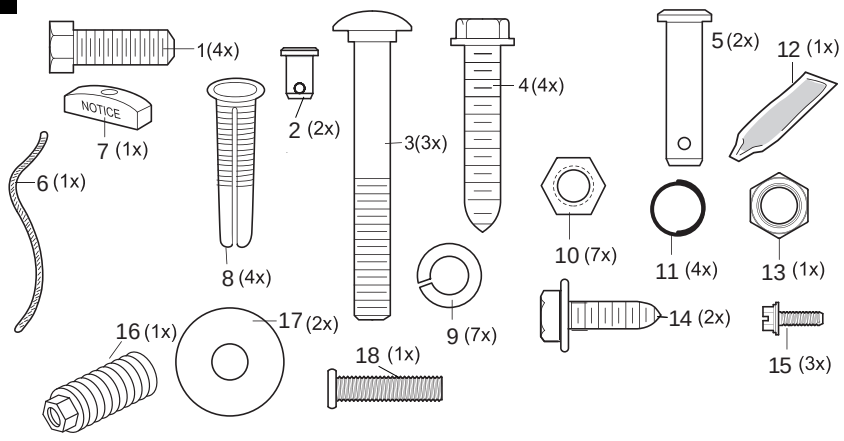
To suit spring balanced sectional doors up to 13.5m² or spring balanced Tilt doors up to 8.5m².



2 *TOOLS REQUIRED*



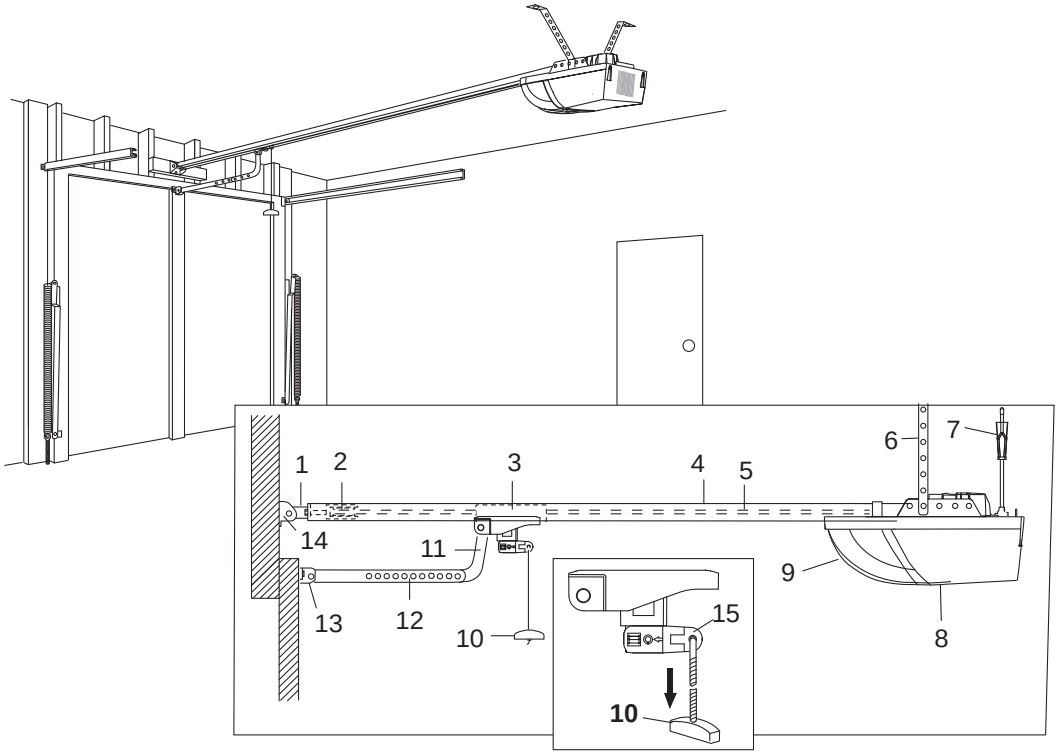
3 *HARDWARE PROVIDED*



(1) Hex Bolt
(2) Clevis Pin
(3) 8mm Carriage Bolt
(4) Wood Screws
(5) Clevis Pin
(6) Rope
(7) Handle
(8) Concrete Anchor
(9) Lock Washer
(10) Hex Nut
(11) Ring Fastener
(12) Rail Grease
(13) Lock Nut
(14) Metric Tapping Screw
(15) Hex Screw
(16) Spring
(17) Flat Washer
(18) Stop Bolt

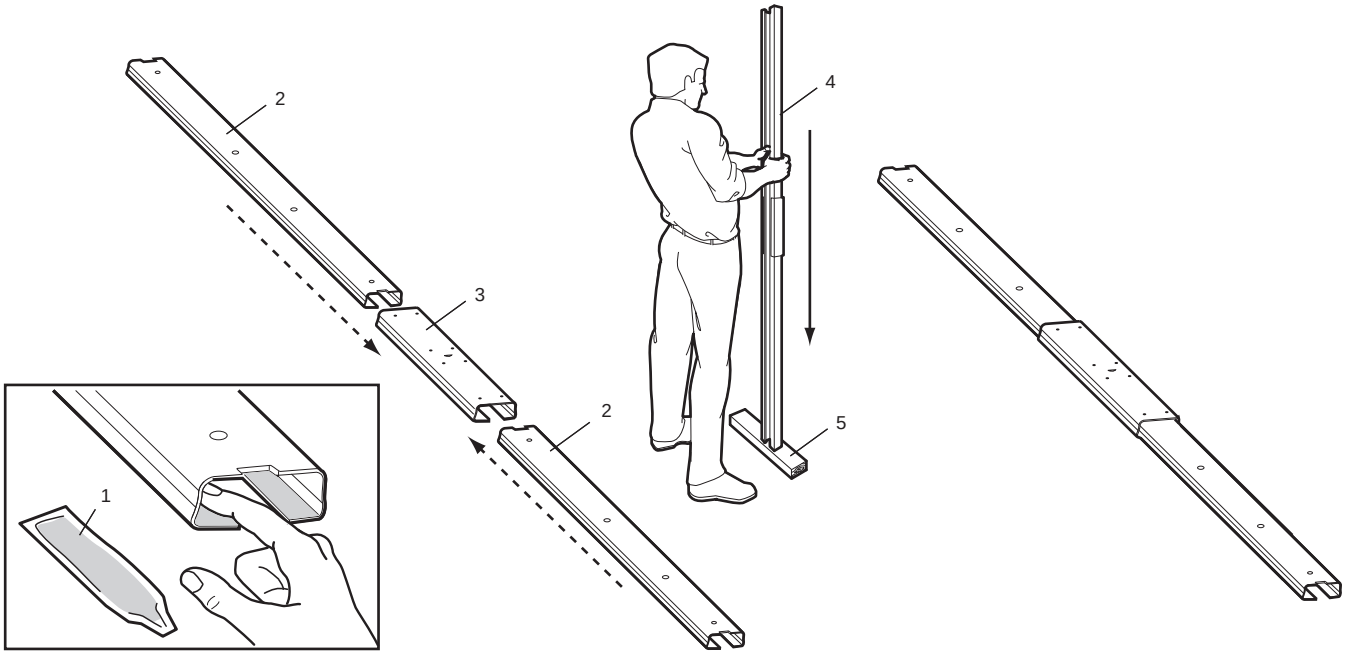
4 *COMPLETED INSTALLATION (TILT DOOR EXAMPLE SHOWN)*

As you proceed with the assembly, installation and adjustment procedures in this manual, you may find it helpful to refer back to this illustration of a completed installation.



(1) Header Sleeve
(2) Idler Pulley Bracket
(3) Trolley
(4) Rail
(5) Chain
(6) Hanging Bracket
(7) Power Cord
(8) Opener
(9) Light Lens
(10) Manual Release Rope & Handle
(11) Curved Door Arm
(12) Straight Door Arm
(13) Door Bracket & Plate
(14) Header Bracket
(15) Trolley Release Arm

5 ASSEMBLE THE RAIL

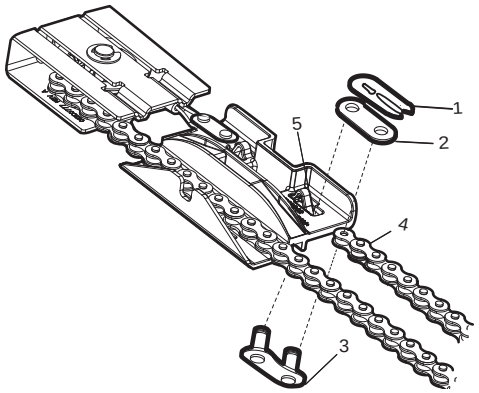


Grease inside edges of rail sections using grease (1). Place rail pieces (2) on flat surface for assembly. All four rail sections are interchangeable. Slide rail brace (3) onto rail section. Connect rail by sliding rail brace onto next rail section. Tap rail assembly (4) on piece of wood (5) until rail sections are flush. Repeat with remaining rail sections.

6 INSTALL THE CHAIN

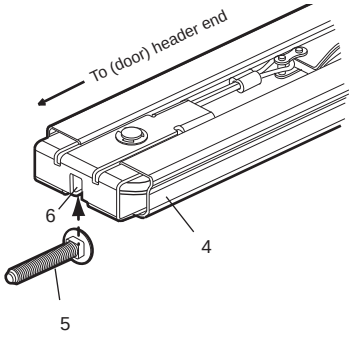
Remove chain from the carton and lay it out on the floor (be careful not to allow the chain to twist).

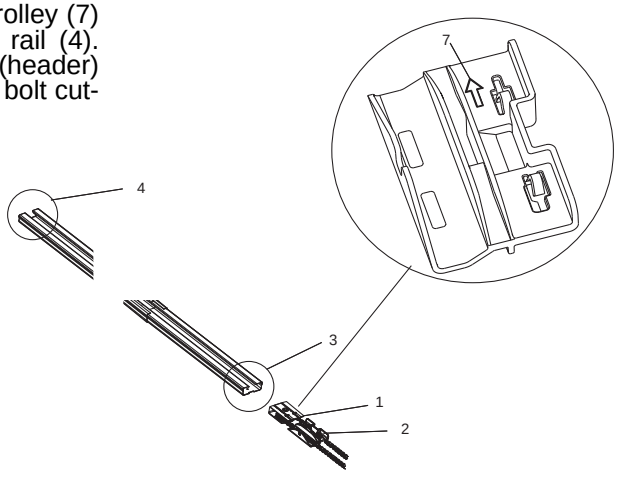
Push the pins of the master link bar (3) through chain link (4) and hole in trolley (5). Push cap (2) over the pins and slide clip-on spring (1) over cap and onto pin notches until both pins are securely locked into place.

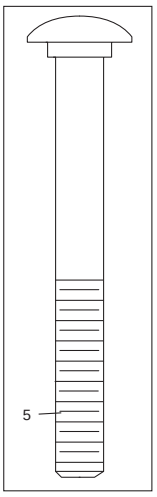


7 INSERT TROLLEY & IDLER PULLEY BRACKET INTO RAIL

Slide idler pulley bracket (1) and inner trolley (2) into the end of rail assembly (3), be sure to insert idler pulley bracket as shown. Arrow on trolley (7) must face toward front (header) end of rail (4). Push idler pulley bracket toward front (header) end of rail (4). Insert carriage bolt (5) into bolt cut-out in the idler pulley bracket (6).



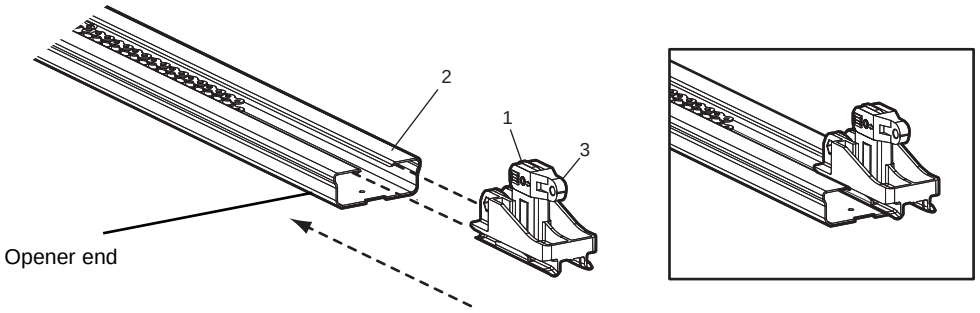




8 *ATTACH TROLLEY TO RAIL*

Slide outer trolley (1) into the back end of the rail assembly (2), be sure end with trolley release arm (3) is pointing in direction of the opener end. Slide outer trolley down rail until it engages with inner trolley.

Turn rail assembly over ready for next operation.

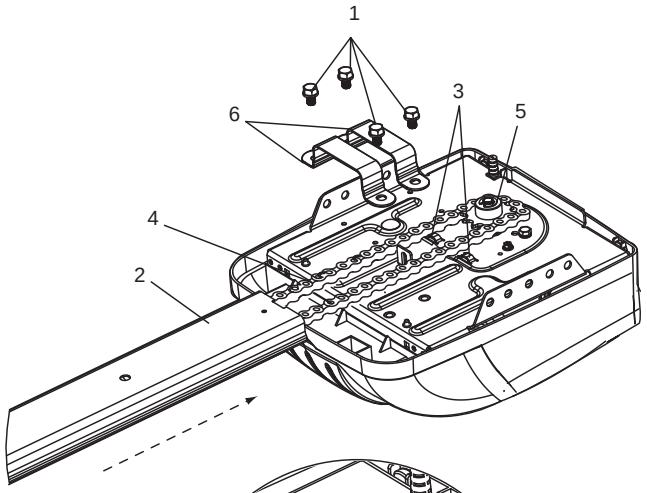


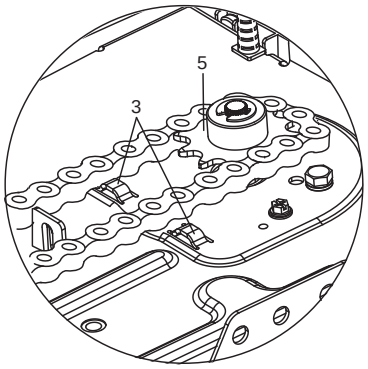
9 *FASTEN RAIL TO OPENER AND INSTALL CHAIN*

Remove four washered bolts (1) from top of opener. Place rail (2) on opener, flush with stop (3) on top of opener. Wrap chain (4) over sprocket (5). Push idler pulley bracket assembly toward front of the rail to eliminate excess slack in chain. Align bolt holes on brackets (6) with bolt holes on opener. Secure brackets to opener with previously removed bolts. Tighten bolts securely.

The opener sprocket teeth must engage the chain.

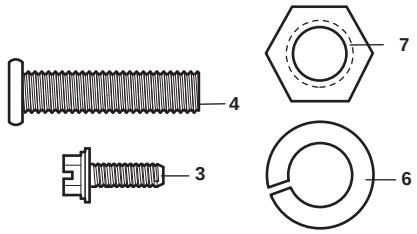
CAUTION: Use only those bolts mounted in the top of opener. Use of any other bolts will cause serious damage to opener.

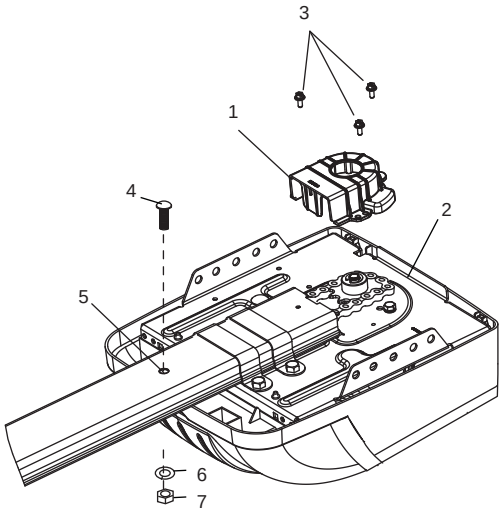




10 *ATTACH SPROCKET COVER*

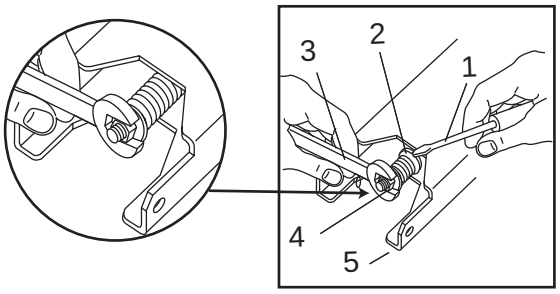
Place sprocket cover (1) on top of the opener (2), secure with screws (3). Insert bolt (4) into trolley stop hole (5), secure with washer (6) and nut (7).





11 *ASSEMBLE HEADER SLEEVE*

Thread spring nut on carriage bolt until finger tight. Insert a screwdriver tip (1) into one of the slots of the nut ring (2) and brace it firmly against the header sleeve. Place an open end wrench (3) on the square end of the spring nut (4), slightly rotate nut about 1/4 turn clockwise until nut ring (2) is released against header sleeve (5). This sets spring to optimum chain tension. Chain may slip off sprocket if chain is too loose. If chain does slip re-tighten spring nut by turning nut clockwise a half turn. ***Do NOT over-tighten chain.***



INSTALLATION SECTION

Wear protective goggles when working overhead to protect your eyes from injury.

Disengage all existing garage door locks to avoid damage to the garage door.

To avoid serious personal injury from entanglement, remove all ropes connected to the garage door before installing the opener.

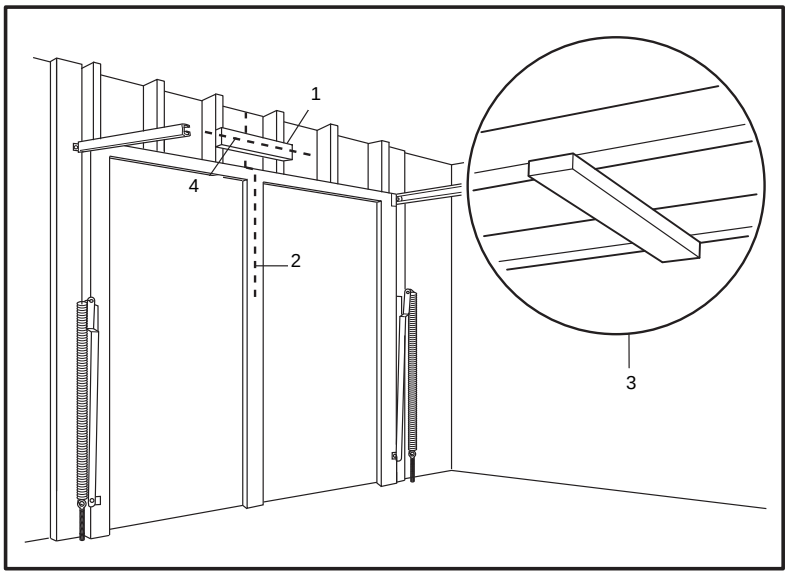
12 *HEADER BRACKET POSITIONING*

The header bracket must be rigidly fastened to a structural support of the garage. Reinforce the wall or ceiling with a 40 mm (1-1/2") board if necessary. Failure to comply may result in improper operation of safety reverse system.

You can attach the header bracket either to the header wall (1) or to the ceiling (3). Follow the instructions which will work best for your particular requirements.

With the door closed, mark the vertical centerline (2) of the garage door. Extend line onto header wall above the door.

Open door to highest point of travel. Draw an intersecting horizontal line (4) on header wall 5 cm (2") above high point to provide travel clearance for top edge of door.

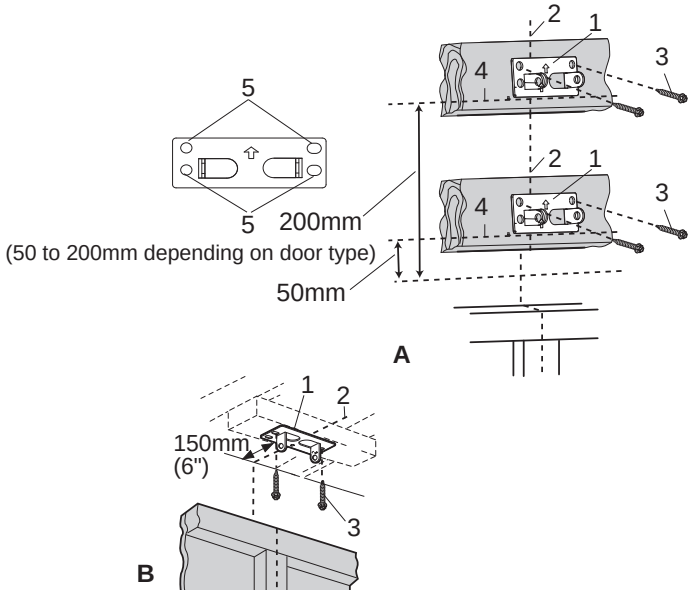


13 *INSTALL THE HEADER BRACKET*

NOTE: Refer to vertical centre and horizontal lines created in section 12 for proper placement of header bracket.

A. **Wall mount:** centre the header bracket (1) on the vertical centre line (2) with the bottom edge of the header bracket on the horizontal line (4) (with the arrow pointing toward the ceiling). Mark all of the header bracket holes (5). Drill 4.5mm (3/16") pilot holes and fasten the header bracket with wood screws (3).

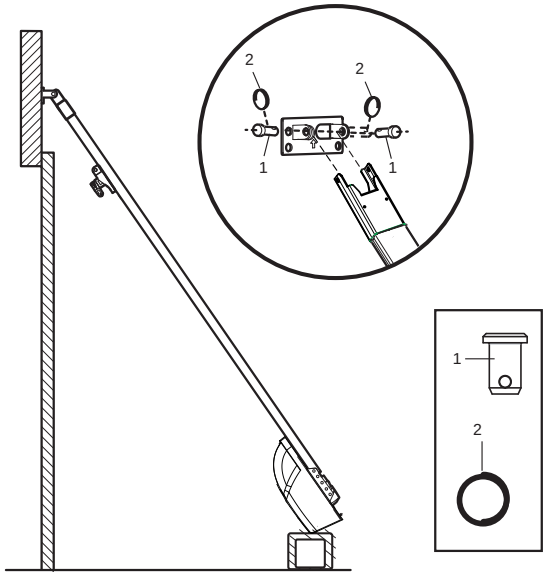
B. **Ceiling mount:** extend vertical centre line (2) onto the ceiling. Centre the header bracket (1) on the vertical mark no more than 150mm (6") from the wall. Make sure the arrow is pointing toward the opener. Mark all of the header bracket holes (5). Drill 4.5mm (3/16") pilot holes and fasten the header bracket with wood screws (3). For concrete ceiling mount, use concrete anchors provided.



14 *ATTACH RAIL TO HEADER BRACKET*

Position opener on garage floor below the header bracket. Use packing material to protect the cover. Raise rail until holes in the header sleeve and holes in the header bracket align. Join with clevis pins (1). Insert ring fasteners (2) to secure.

NOTE:To enable the rail to clear sectional door springs, it may be necessary to lift opener onto a temporary support. The opener must either be secured to a support or held firmly in place by another person.

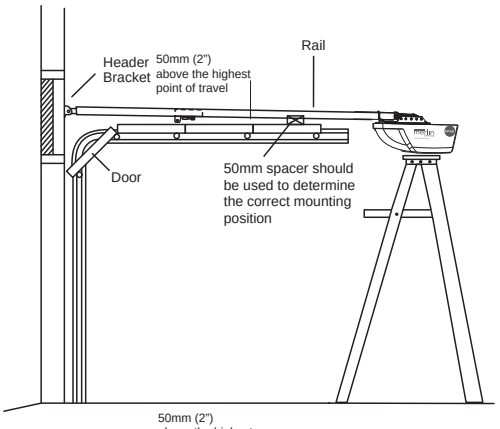


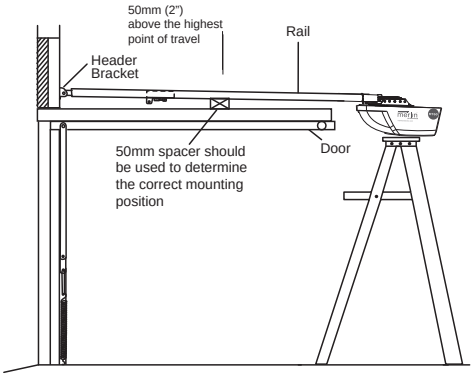
15 *POSITION THE OPENER*

SECTIONAL DOOR OR TRACKED TILT DOOR

You will need a 50mm piece of timber or similar spacer to gauge the distance between door and rail.

1. Raise the opener onto support.
2. Open the door completely, place a 50mm spacer between the door and the rail (as shown).
3. If the top section or panel hits the trolley when you raise the door, pull down on the trolley arm to disengage the opener. Leave the trolley in this position until opener is fastened in place.

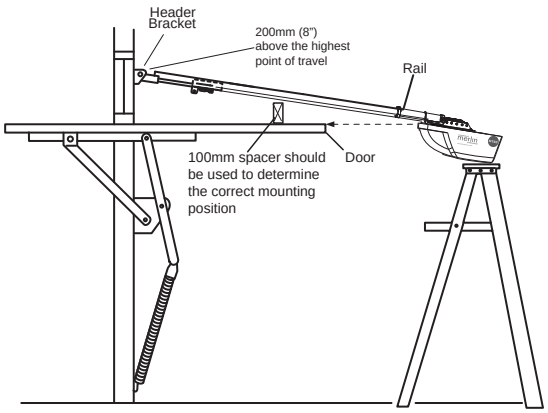

Header Bracket
50mm (2") above the highest point of travel
Rail
Door
50mm spacer should be used to determine the correct mounting position


50mm (2") above the highest point of travel
Rail
Header Bracket
Door
50mm spacer should be used to determine the correct mounting position

ONE PIECE TILT DOOR

You will need a 100mm (4") piece of timber or similar spacer to gauge the distance between door and rail.

1. Raise the opener onto support.
2. Open the door completely, place a 100mm spacer between the door and the rail (as shown).
3. The top of the door should be level with the top of the opener. Do not position the opener more than 50mm (2") above this point.


Header Bracket
200mm (8") above the highest point of travel
Rail
Door
100mm spacer should be used to determine the correct mounting position

16 *HANG THE OPENER*

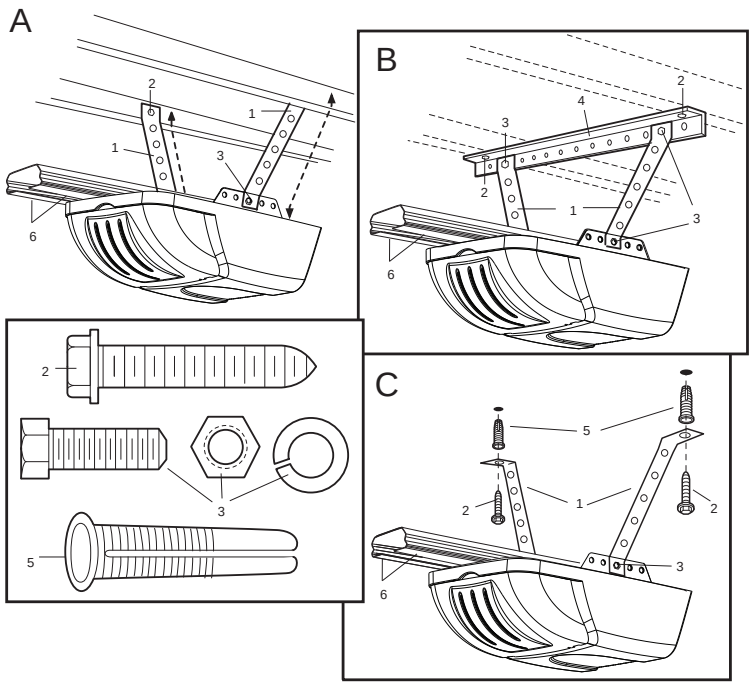
The opener must be securely fastened to a structural support of the garage.

Three representative installations are shown. Yours may be different. Hanging brackets (1) should be angled (Figure A) to provide rigid support. On finished ceilings, (Figure B) attach a sturdy metal bracket (not supplied) (4) to a structural support before installing the opener. For concrete ceiling mount, (Figure C), use concrete anchors (5) provided.

On **each** side of opener measure the distance from the opener to the structural support (or ceiling).

Cut both pieces of the hanging bracket to required lengths. Flatten one end of each bracket and bend or twist to fit the fastening angles. **Do not bend at the bracket holes.** Drill 4.5mm (3/16") pilot holes in the structural supports (or ceiling). Attach brackets to supports with wood screws (2).

Lift opener and fasten to hanging brackets with screw, lock washer and nut (3). Check to make sure rail is centered over the door. REMOVE 25mm (1") board. Operate door manually. If door hits the rail, raise header bracket. Use rail grease and lubricate bottom surface of rail (6).



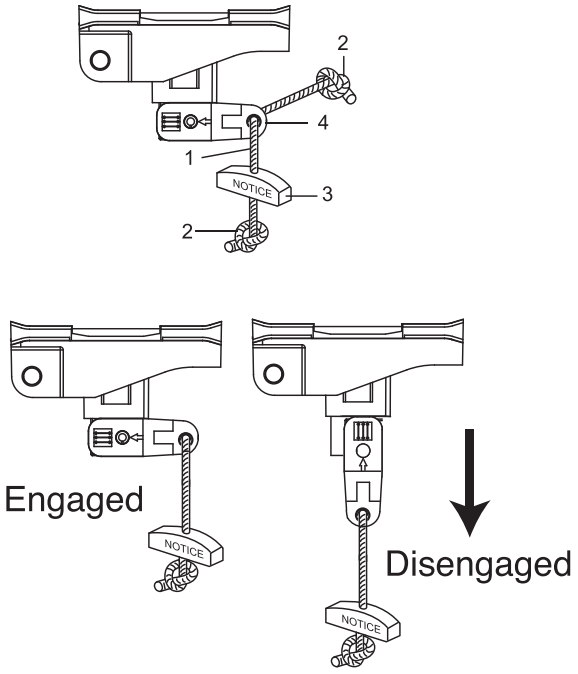
17 *ATTACH EMERGENCY RELEASE ROPE & HANDLE*

Thread one end of rope (1) through hole in top of red handle so "NOTICE" reads right side up as shown (3). Secure with an overhand knot (2). Knot should be at least 25mm (1") from end of the rope to prevent slipping.
Thread other end of rope through hole in release arm of the outer trolley (4). Adjust rope length so that handle is less than 1.8m (6 feet) above the floor. Secure with an overhand knot.

NOTE: If it is necessary to cut rope, heat seal cut end to prevent fraying.

Door should be released in the closed position if possible.
To Release the trolley PULL down on the red handle.
DO NOT USE THE HANDLE TO OPEN OR CLOSE THE DOOR.

DO NOT DISENGAGE THE OPENER TO MANUAL OPERATION WITH CHILDREN , PERSONS OR OTHER OBJECTS INCLUDING MOTOR VEHICLES WITHIN THE DOORWAY: (The door is under significant tension and if the door has developed a fault or incorrect tension, it may be unsafe and may fall rapidly.)



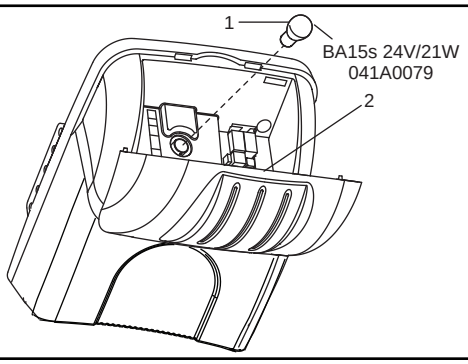
Connect Electric Power

TO AVOID INSTALLATION DIFFICULTIES, DO NOT RUN THE GARAGE DOOR OPENER UNTIL INSTRUCTED TO DO SO.
Connect to properly fused and earthed power outlet.

19 *INSTALL LIGHT*

Gently pull lens (2) downward until the lens hinge is in the fully open position. Do not remove the lens. Install a 24V/21W maximum light bulb (1) in the socket as shown. The light will turn on and remain lit for 2-1/2 minutes when power is connected. After 2-1/2 minutes it will turn off. To close, gently push diffuser up until engaged.

Replace burnt out bulbs with Chamberlain 041A0079 or reputable light bulbs.



20 *FASTEN DOOR BRACKET*

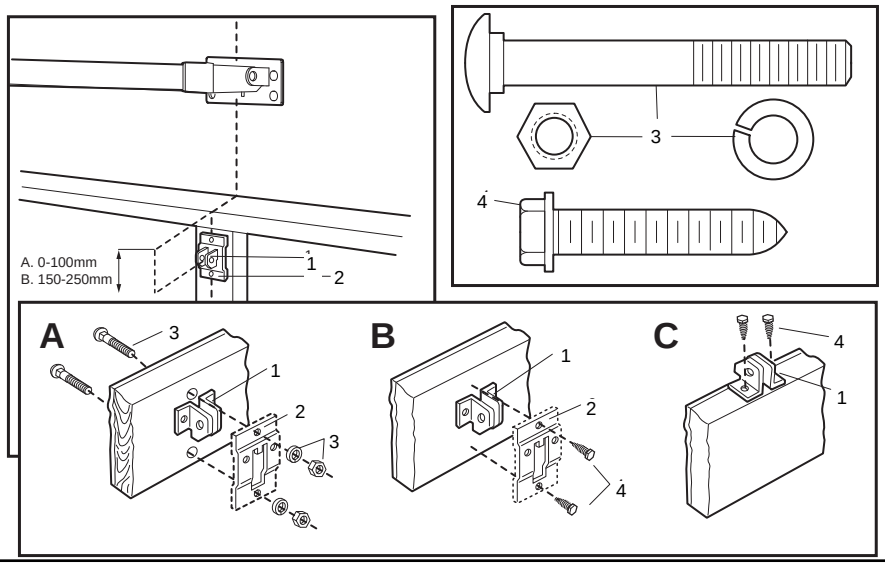
Sectional and One-Piece Door Installation Procedure:

Door bracket (1) has left and right side fastening holes. If your installation requires top and bottom fastening holes use both the door bracket and door bracket plate (2) as shown.

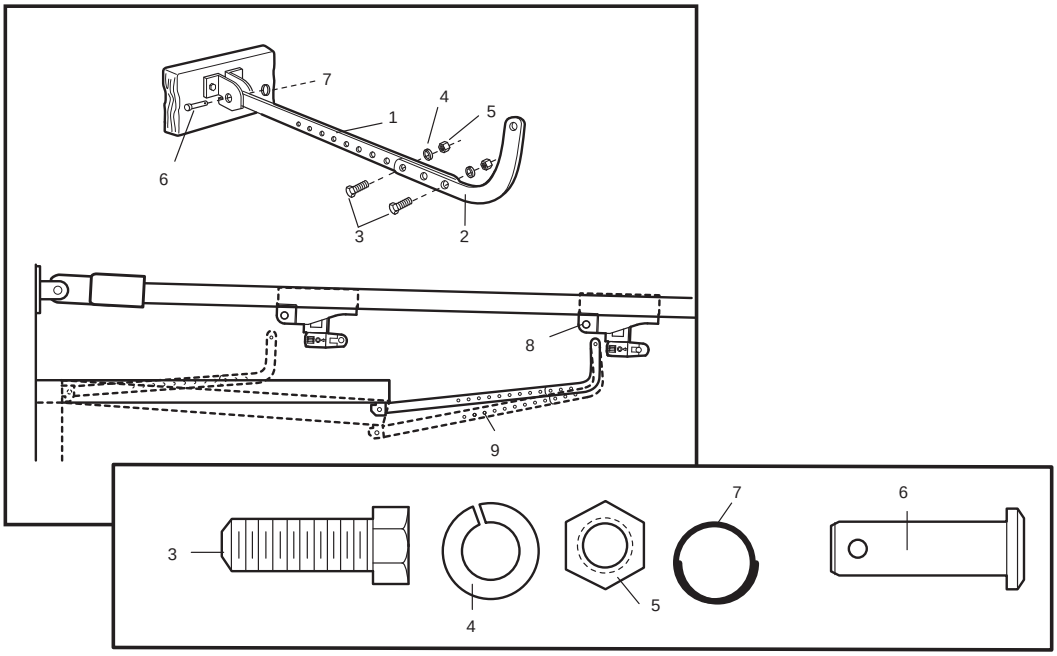
1. Center door bracket (with or without door bracket plate, as required) at the top inside face of door as shown. Mark holes.
   A. One-piece doors: locate bracket at inside face of the door 0-100mm down.
   B. Sectional doors: 150 - 250mm below the top of the door.
2. **A. Wooden doors**
   Drill 8mm holes (5/16") and fasten the door bracket with nut, lock washer, and carriage bolt **(3).**

   B. Sheet metal doors
   Fasten with wood screws **(4)**.

   C. One-piece door optional
   Fasten with wood screws **(4)**.



21 *CONNECT DOOR ARM - ONE PIECE DOORS*



ONE-PIECE DOOR INSTALLATION:

Fasten the straight (1) and curved (2) door arm sections together to the longest possible length (with a 2 or 3 hole overlap) using hardware (3,4 and 5). With the door closed connect the straight door arm section (1) to the door bracket with clevis pin (6). Secure with ring fastener (7). Disconnect the inner and outer trolley. Slide the outer trolley back toward the opener and join the curved arm (2) to the connector hole in the trolley (8) with clevis pin (6). It may be necessary to lift the door slightly to make the connection. Secure with ring fastener (7).

NOTE: When setting the up limit, the door should not have a "backward" slant when fully open. A slight backward slant (9) will cause unnecessary bucking and/or jerking operation as the door is being opened or closed from the fully open position.

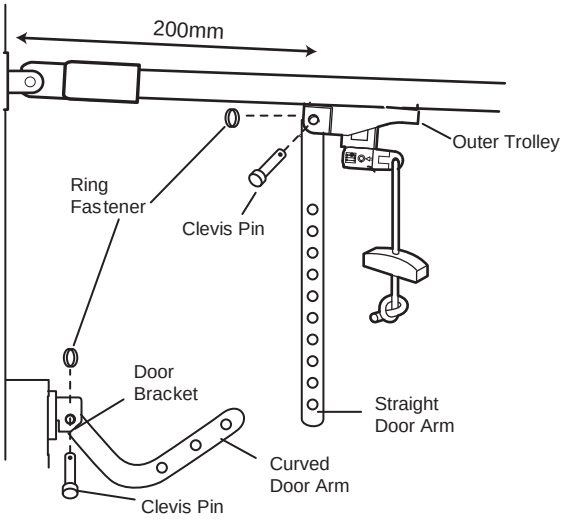
21 CONNECT DOOR ARM SECTIONAL DOORS

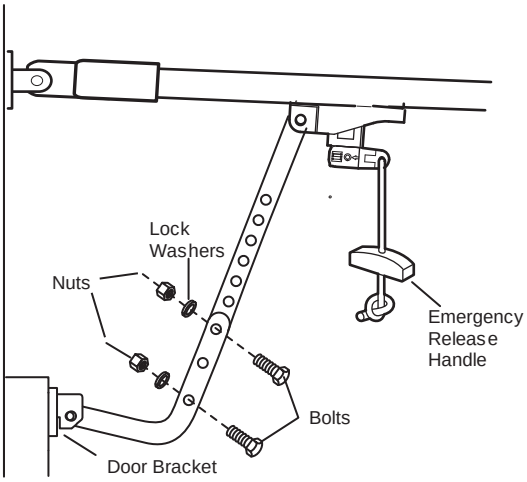
Make sure garage door is fully closed. Pull the emergency release handle to disengage the trolley. Slide the trolley assembly back 200mm from the idler pulley.

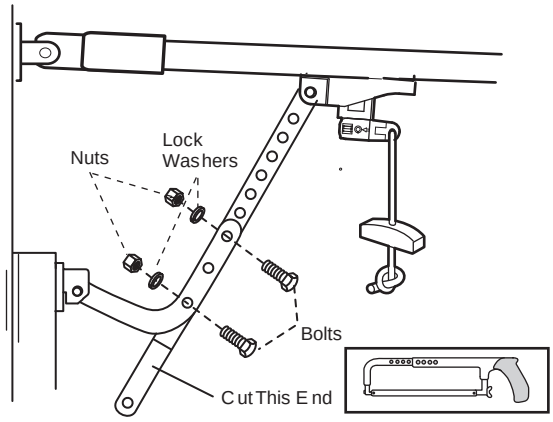
Figure 1.
- Fasten straight door arm section to trolley assembly using the hardware provided with your opener.

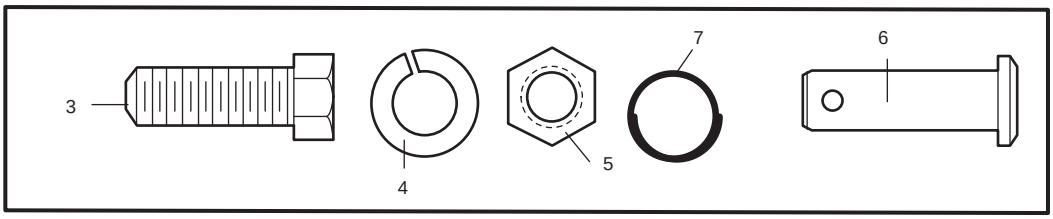
Figure 2.
- Bring arm section together. Find two pairs of holes that line up and join sections. Select holes as far apart as possible to increase door arm rigidity.

Figure 3.
- If holes in curved arm are above holes in the straight arm, disconnect straight arm and cut approximately 150mm from the solid end. Re-connect to trolley with end cut end down as illustrated.
- Bring arm sections together.
- Find two pairs of holes that line up and join with bolts, washers and nuts.

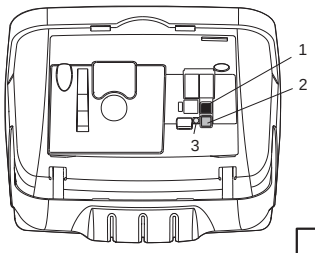








22 *SETTING THE LIMITS*



Travel limits regulate the points at which the door will stop when moving up or down. Follow the steps below to set the limits.

NOTE: The door must be in the mid or closed position to begin setting the limits.

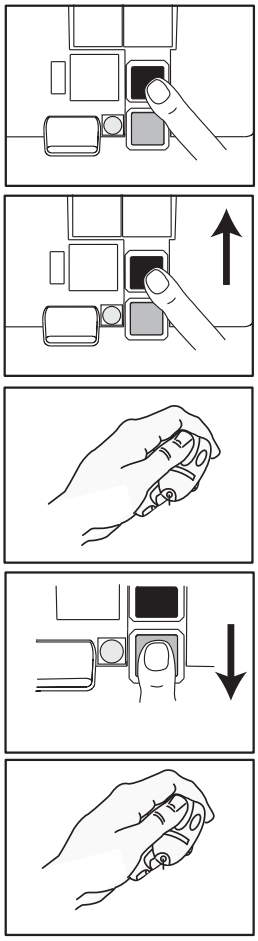
Turn power on

Setting the limits :

1. Press and hold the black button until the yellow indicator light starts flashing slowly then release.
2. Adjust the desired up position of the door by using the black and orange buttons. Black moves the door UP (open) and orange moves the door DOWN (close). Check to be sure the door opens high enough for your vehicle.
3. Push the transmitter or door control. This sets the UP (open) limit and begins closing the door.

Immediately press either the orange or the black button. The door will stop.

4. Adjust the desired DOWN (close) limit position using the black and orange buttons. Check to be sure the door is fully closed without applying excessive pressure on the rail (rail should not bow upwards and the chain should not sag or droop below the rail). Push the transmitter or door control. This sets the DOWN (close) limit and begins opening the door.
5. Open and close the door with the transmitter or door control 2 or 3 times (leave door in open position ready for force setting).



The Force must now be set in order to complete your installation. Go to section 23.

23 *SETTING THE FORCE*

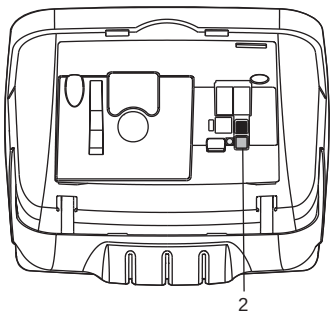
The force setting button is located behind the light lens of the opener. The force setting regulates the amount of power required to open and close the door.

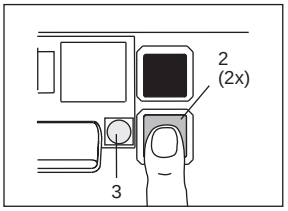
1. Open the light lens. Locate the orange button (2).
2. Push the orange button (2) twice to enter unit into Force Adjustment Mode. The LED (3) (indicator light) will flash quickly.
3. Push the programmed transmitter (4) or wireless wall button (if installed). The door will travel to the DOWN (close) position. Push the transmitter (4) again, the door will travel to the UP (open) position.

The LED (3) (indicator light) will stop flashing when the force has been learned.

The door must travel through a complete cycle, UP and DOWN, in order for the force to be set properly. If the unit cannot open and close your door fully, inspect your door to ensure that it is balanced properly and is not sticking or binding.

The force MUST be learned in order to properly complete the setting of the limits.

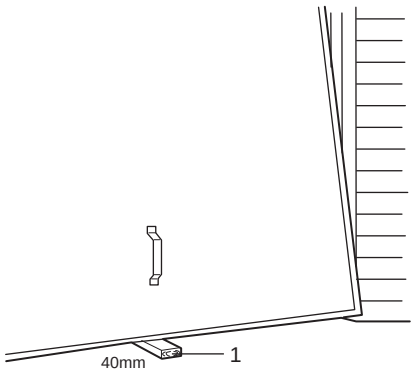


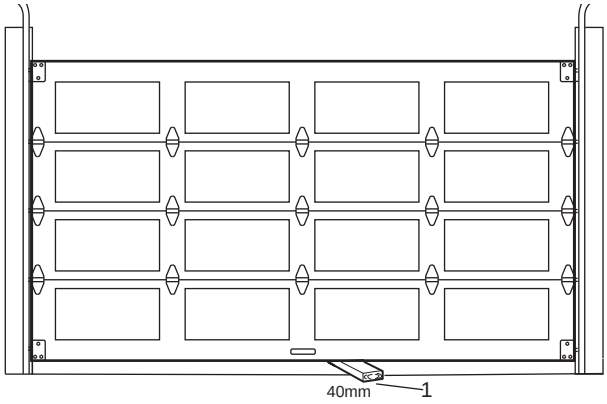


24 *TEST THE SAFETY REVERSE SYSTEM*

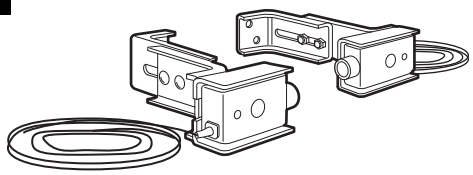
The safety reverse system test is important. Garage door must reverse on contact with a 40mm obstacle laid flat on the floor. Failure to properly adjust opener may result in serious personal injury from a closing garage door. Repeat test once a month and adjust as needed.

Procedure: Place a 40mm obstacle (1) laid flat on the floor under the garage door. Operate the door in the down direction. The door must reverse on the obstacle. If the door stops on the obstacle, remove obstacle and repeat Setting the Limits and Force Steps, then repeat safety reverse test.
When the door reverses on the 40mm obstacle, remove the obstacle and run the opener through a complete travel cycle. Door must not reverse in closed position. If it does, repeat Setting the Limits and Force then repeat safety reverse test.





25 *INSTALL THE PROTECTOR SYSTEM™ (See accessories)*



SAFETY FIRST!
Whilst Chamberlain have engineered safety features into your garage door opener, we urge you to consider fitting IR Beams to your new garage door opener. In many countries these devices are compulsory to prevent serious injury or property damage. For your own peace of mind and the safety of others please install this inexpensive safety device.

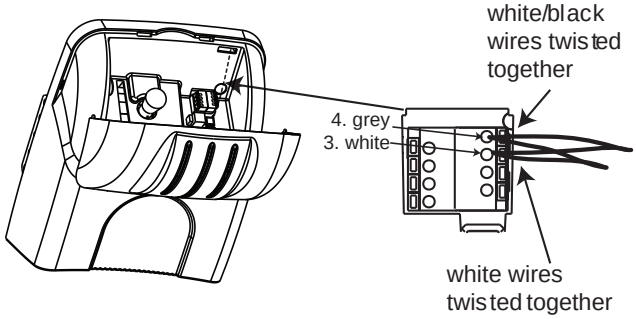
Install this accessory for all installations on tilt doors, doors over 2.5m and when the closing force as measured on the bottom of the door is over 400N (40kg).
After opener has been installed and adjusted, **The Protector System™** accessory can be installed. Instructions are included with this accessory.

The Protector System™ provides an additional measure of safety against a small child being caught under a garage door. It uses an invisible beam which, when broken by an obstruction, causes a closing door to open and prevents an open door from closing and is *strongly recommended for homeowners with young children.*

NOTE: The opener will automatically detect the protector system when it is installed. The opener will not close unless the sensors are aligned.

Connecting the Protector System

Locate the terminals on the back of the unit. Strip all wires back about 10mm then twist the two white wires and the two white/black wires together. Trim the twisted wires to approximately 6mm. Use a small screwdriver or pen to hold down the spring terminals, insert the white/black wires into the grey terminal (4), then terminate the white (only) wires into the white terminal (3).



26 *INSTALL DOOR CONTROL (OPTIONAL)*

Locate door control where the garage door is visible, away from door and door hardware and out of the reach of children. Mount at least 1.5m (5 feet) above the floor

Serious personal injury from a moving garage door may result from misuse of opener. Do not allow children to operate the door control or transmitter.

Permanently fasten the caution label permanently to the wall near the door control as a reminder of safe operating procedures.

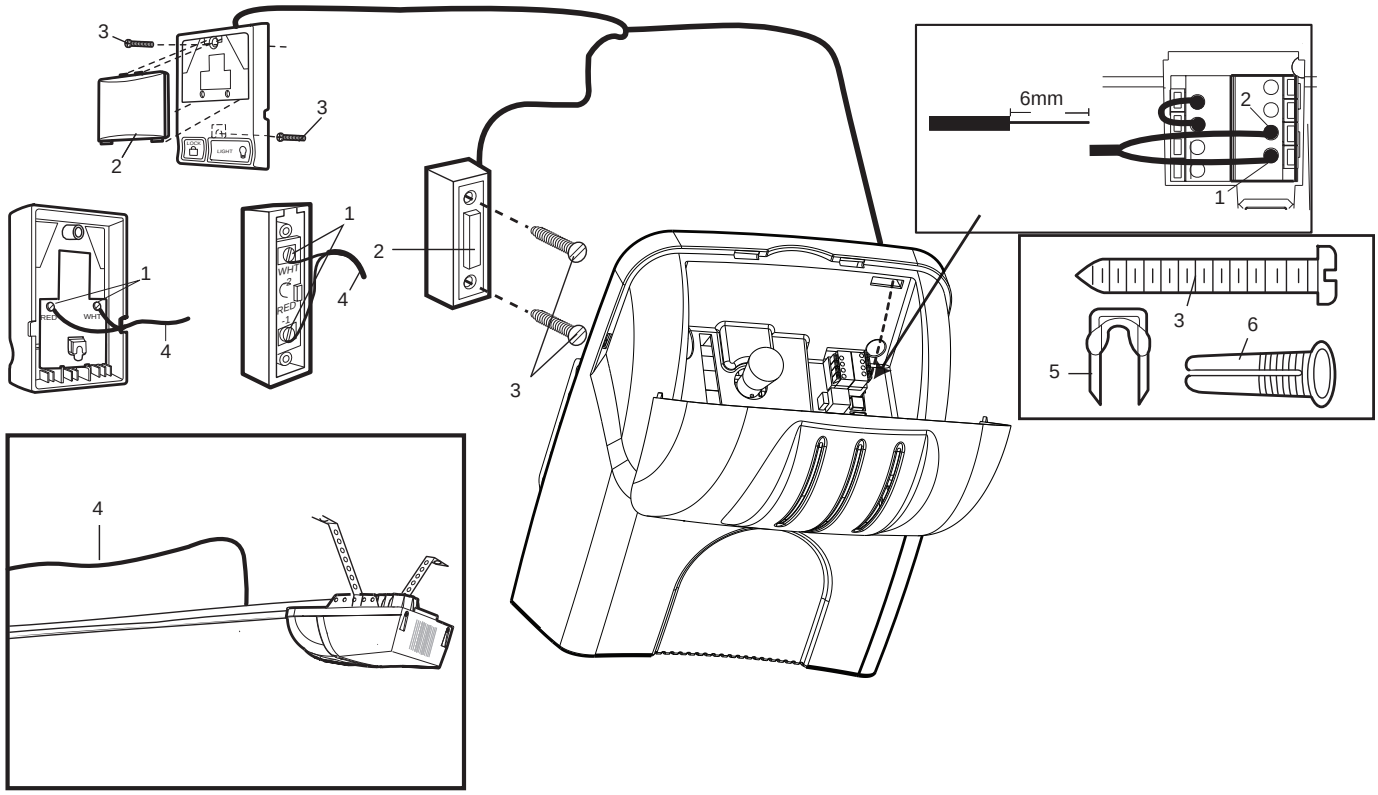
There are 2 terminals (1) on the back of the door control (2). Strip about 6mm (1/4") of insulation from bell wire (4). Separate wires enough to connect the white/red wire to RED terminal screw 1 and the white wire to WHT terminal screw 2.

Fasten the door control to an inside garage wall with sheet metal screws (3) provided. Drill 4mm (5/32") holes and use anchors (6) if installing into plasterboard wall. A convenient place is beside the service door and out of reach of children.

Run the bell wire up the wall and across the ceiling to the garage door opener. Use insulated staples (5) to secure wire. The receiver quick connect terminals are located behind the light lens of the opener. Connect the bell wire to the terminals as follows: white/red to red (1) and white to white (2).

Operation of the Door Control

Press to open or close the door. Press again to stop the door while moving.



27 *WIRELESS PROGRAMMING (OPTIONAL ACCESSORIES)*

Activate the opener only when door is in full view, free of obstruction and properly adjusted. No one should enter or leave garage while door is in motion. Do not allow children to operate push button(s) or remote(s). Do not allow children to play near the door.

NOTE: The transmitter(s) and wireless wall button supplied with your opener are factory programmed.

If you purchase additional transmitters, the garage door opener must be programmed to accept the new remote code.

Program the Receiver to Match Additional Transmitter Codes:
Using the orange "LEARN" Button:

1. Press and hold down the transmitter button you wish to program to the opener. The orange LED will flash to indiciate it is receiving signal from the transmitter.
2. Press and release the "LRN" button.
3. The sourtesy LEDs will flash once.

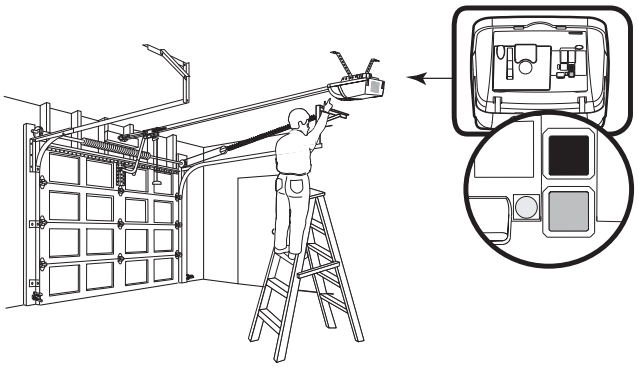
Ensure the door is clear of obstruction, then test the transmitter.

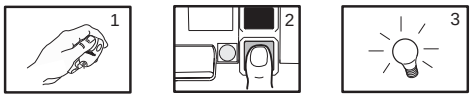
Using the Motion Detecting Control Panel (optional accessory):

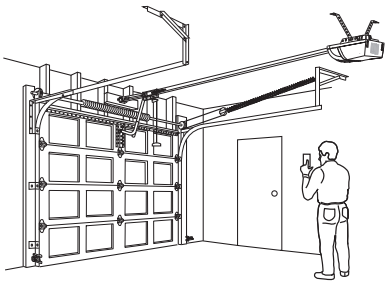
1. Press and hold the button on the hand-held remote that you wish to operate your garage door (1).
2. While holding the remote button, press and hold the LIGHT button on the Motion Detecting Control Panel (2).
3. Continue holding both buttons while you press the push bar on the Motion Detecting Control Panel (all three buttons are held) (3).
4. Release buttons when the opener light flashes. It has learned the code. If the light bulb is not installed, two clicks will be heard (4).

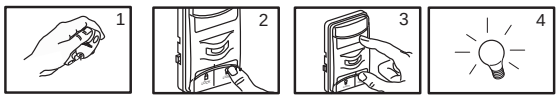
Now the opener will operate when the transmitter push button is pressed. If you release the transmitter push button before the opener light flashes, the opener has not learned the code.

To Erase all Transmitter Codes:
To deactivate any unwanted remote, first erase all codes: Press and hold the orange "learn" button on opener until the learn indicator light goes out (approximately 6 seconds). All previous codes are now erased. Reprogram each remote or keyless entry you wish to use.







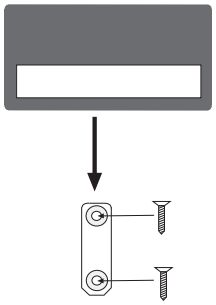


28 *INSTALLING THE C940 WIRELESS WALL BUTTON*

Transmitter can be fixed to the wall or car visor.

- Attach bracket to wall using the two flat head screws provided.
- Slide the remote control onto bracket.
- Fix the warning against entrapment label near the wall control (refer section 26).

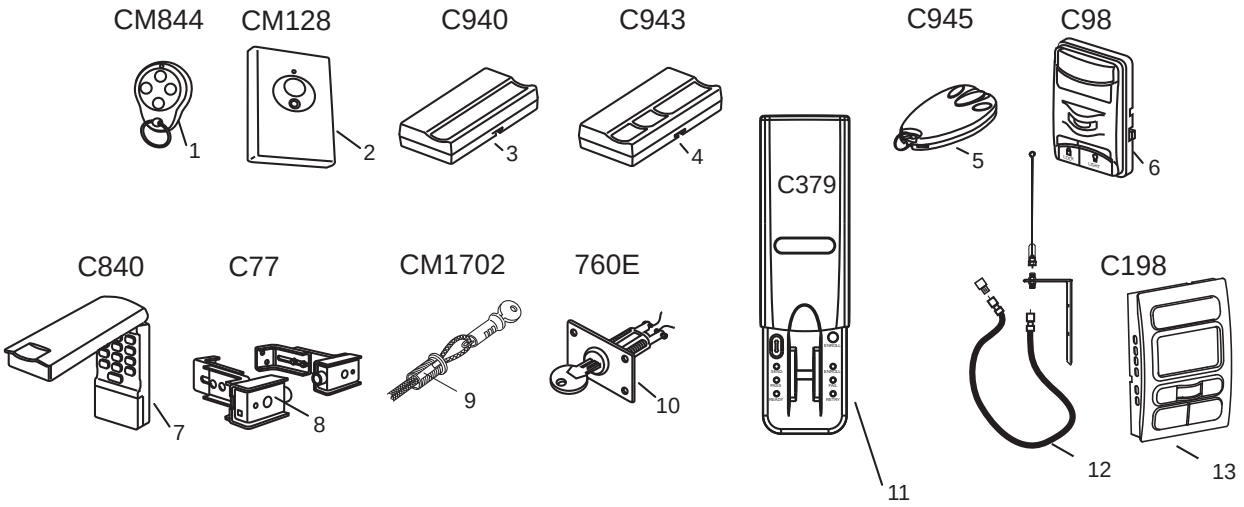
NOTE: Do not over tighten screws, allow enough clearance to slide remote down onto the bracket.



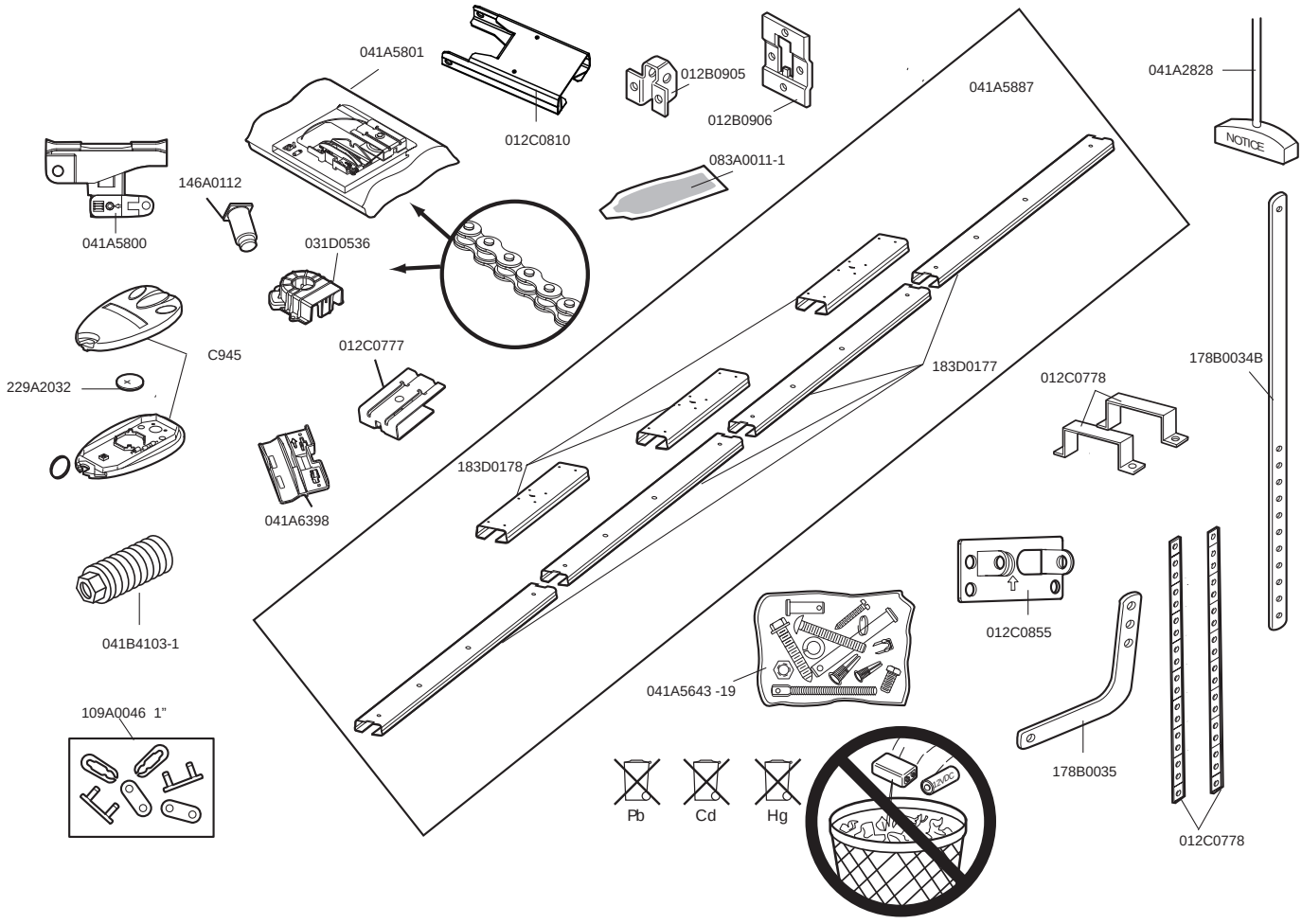
Locate minimum 1.5m above the floor.

29 ACCESSORIES

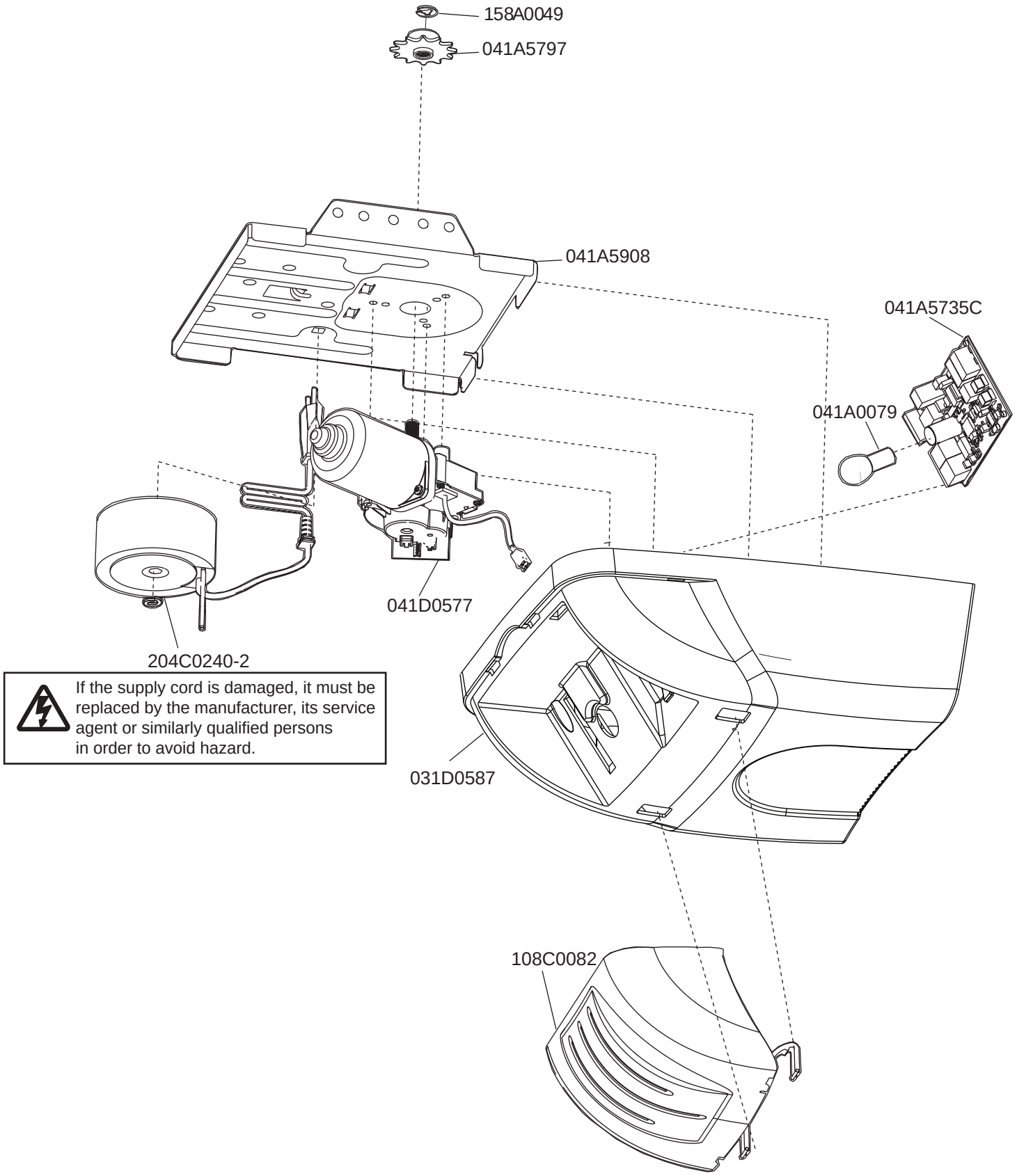
(1) Model CM844 4 Channel transmitter
(2) Model CM128 Wireless Wall Button
(3) Model C940 Single-Channel transmitter
(4) Model C943 3-Channel transmitter
(5) Model C945 3-Channel Mini transmitter
(6) Model C98 Motion Detecting Control Panel
(7) Model C840 Keyless Entry System
(8) Model C77 The Protector System™ IR Beams
(9) Model CM1702 Quick Release Lock
(10) Model 760E Outside Keyswitch
(11) Model C379 Wireless Fingerprint Access System
(12) Model ANT4X-1LM 433MHz Antenna, Cable and Adaptor
(13) Model C198 LCD Motion Detecting Control Panel



30 REPLACEMENT PARTS



31 *REPLACEMENT PARTS*



TROUBLE SHOOTING

1. Opener doesn't operate from either door control or transmitter:

- Check jumper installed between 7 & 8 see page 14.
- Does the opener have electric power? Plug lamp into outlet. If it doesn't light, check the fuse box or the circuit breaker. (Some outlets are controlled by a wall switch.)
- Have you disengaged all door locks? Review installation instruction warnings on page 2.
- Is there a build-up of ice or snow under door? The door may be frozen to ground. Remove any obstruction.
- The garage door spring may be broken. Have it replaced.

2. Opener operates from transmitter but not from door control:

- Is door control button lit? If not, remove the bell wire from the opener terminals. Short the red and white terminals by touching both terminals at the same time with a piece of wire. If the opener runs, check for a faulty wire connection at the door control, a short under the staples, or a broken wire.
- Are wiring connections correct? Review page 14.

3. Door operates from door control but not from transmitter:

- Replace battery if necessary.
- If you have two or more transmitters and only one operates, review Program Your Opener, Transmitter and Keyless Entry sections 27 and 28.
- Is the door control button flashing? The opener is in lock mode. If you have a Multi-Function Door Control, push and hold the Lock button for 2 seconds. The door control button will stop flashing.

4. Transmitter has short range:

- Is battery weak, replace battery and test range.
- Change the location of the transmitter on the car.
- A metal garage door, foil-backed insulation or metal siding will reduce the transmission range.

5. Door reverses for no apparent reason and opener light doesn't blink:

- Is something obstructing the door? Pull manual release handle. Operate door manually. If it is unbalanced or binding, call for professional garage door service.
- Clear any ice or snow from garage floor area where garage door closes.
- Repeat Setting Limits and Force, see adjustment sections 22 and 23.

Repeat safety reverse test after adjustment is complete.

6. Door reverses for no apparent reason and opener light blinks for 5 seconds after reversing:

Check The Protector System™ (if you have installed this accessory). If the light is blinking, correct alignment.

7.Door not opening fully:

Repeat limit settings as outline in section 22 page 12, if required.

8. The garage door opens and closes by itself:

Make sure transmitter push button is not stuck "on".

9. Door stops but doesn't close completely:

Repeat Setting the Limits, see adjustment section 22.

Repeat safety reverse test after any adjustment of door arm length, close force or down limit.

10. Door opens but won't close:

- Check The Protector System™ (if you have installed this accessory). If the light is blinking, correct alignment.
- If opener light does not blink and it is a new installation, repeat Setting the Limit and Force sections 22 and 23.

Repeat the safety reverse test after the adjustment is complete.

11. Opener light does not turn on:

Replace light bulb (24V/21W maximum).

12. Opener strains:

Door may be unbalanced or springs are broken. Close door and use manual release rope and handle to disconnect trolley. Open and close door manually. A properly balanced door will stay in any point of travel while being supported entirely by its springs. If it does not, call for professional garage door service to correct the problem.

13. Opener motor hums briefly, then won't work:

- Garage door springs are broken. SEE ABOVE.
- If problem occurs on first operation of opener, door is locked. Disable door lock.

Repeat safety reverse test after adjustment is complete.

14. Opener won't activate due to power failure:

- Pull manual release rope and handle down to disconnect trolley. Door can be opened and closed manually. When the power is restored, pull the manual release handle back. The next time the opener is activated, the trolley will reconnect.
- The Outside Quick Release accessory (if fitted) disconnects the trolley from outside the garage in case of power failure.

15. Setting the limits manually:

1. Press and hold the black button until the yellow indicator light starts flashing slowly then release.
2. Push and hold the black button until the door reaches the desired UP (open) position. Adjust the position of the door by using the black and orange buttons. Black moves the door UP (open) and orange moves the door DOWN (close).

Check to be sure the door opens high enough for your vehicle.

3. Push the transmitter or door control. This sets the UP (open) limit and begins closing the door. **Immediately press either the orange or the black button.** The door will stop.

   Adjust the desired DOWN (closed) limit by using the orange (DOWN) and black (UP) buttons. Check to be sure the door is fully closed without applying excessive pressure on the rail (rail should not bow upwards and the chain should not sag or droop below the rail). Push the transmitter or door control. This sets the DOWN (close) limit and begins opening the door.

NOTE: *If neither the black or the orange button is pressed before the door reaches the floor, the opener will attempt an Automated Limit Setting, reversing the door off the floor and stopping at the set Up limit. If the yellow indicator light does not blink 10 times, limits setting has been successful and doesn't need to be manually done; the DOWN limit will be set to the floor.* **Regardless of setting the limits automatically or manually, the force MUST be learned in order to properly complete the setting of limits. Refer to section 23, Setting the Force.**

4. **Open and close the door with the transmitter or door control 2 or 3 times.**
   - If the door does not stop in the desired UP (open) position or reverses before the door stops at the DOWN (close) position, repeat *Setting the limits manually* one more time.
   - If the door stops in both the desired UP (open) and DOWN (close) positions, proceed to *Test the Safety Reversal System.*

CARE OF YOUR OPENER

When properly installed, opener will provide high performance with a minimum of maintenance. The opener does not require additional lubrication.

Limit and Force Settings: These settings must be checked and properly set when opener is installed. Weather conditions may cause some minor changes in the door operation, requiring some re-adjustments, particularly during the first year of operation.

Refer to *Setting the Limits and Force* on page 12. Follow the instructions carefully and **repeat the safety reverse test after any adjustment.**

Transmitter Battery: The lithium batteries should produce power for up to 5 years. If transmission range decreases, replace battery.

To Change Battery: To replace batteries, use the visor clip or screwdriver blade to pry open the case. Insert batteries *positive side up*. To replace cover, snap shut along both sides. Do not dispose of the old battery with household waste. Take batteries to a proper disposal center.

USING YOUR OPENER

Your opener can be activated by any of the following devices:

- **The Backlit Door Control Button. (If Installed).** Hold the button down until door starts to move.
- **The Outside Keylock or Keyless Entry System** (if you have installed either of these accessories).
- **The Transmitter.** Hold the push button down until the door starts to move.

Opening the Door Manually:

Door should be fully closed if possible. Weak or broken springs could allow an open door to fall rapidly. Property damage or serious personal injury could result.

The door can be opened manually by pulling the release handle down and back (toward the opener). To reconnect the door, pull the release handle straight down.

Do not use the manual release handle to pull the door opener or closed.

When the Opener is Activated by Transmitter or Backlit Door Control Button:

1. If open, the door will close. If closed, the door will open.
2. If closing, the door will stop.
3. If opening, the door will stop (allowing space for entry and exit of pets and for fresh air).
4. If the door has been stopped in a partially open or closed position, it will reverse direction.
5. If an obstruction is encountered while closing, the door will stop then reverse.
6. If an obstruction is encountered while opening, the door will stop, reverse, then stop.
7. The optional Protector System™ uses an invisible beam which, when broken by an obstruction, causes a closing door to open and prevents an open door from closing. It is STRONGLY RECOMMENDED for homeowners with young children.

The opener light will turn on: 1. when opener is initially plugged in; 2. when the power is briefly interrupted; 3. when the opener is activated.

The light turns off automatically after 2-1/2 minutes. Bulb size is 24V/21W maximum.

MAINTENANCE OF YOUR OPENER

Once a Year:

- **Apply grease to rail and trolley**
- **Oil door rollers, bearings and hinges**
- **DO NOT lubricate the opener itself**
- **DO NOT APPLY grease to the door tracks**

SPECIFICATIONS

Input Voltage	230-240 VAC, 50Hz
Max. Pull Force	600N
Power	100W
Standby Power	3W (nominal)
Normal Torque	5Nm
Max door weight	70kgs

Motor

Type	DC gearmotor permanent lubrication

Drive Mechanism

Drive	Chain with two-piece trolley on steel rail.
Length of Travel	Adjustable to 2.3m
Travel Rate	127-178mm per second
Lamp	On when door starts, off 2-1/2 minutes after stop.
Door Linkage	Adjustable door arm. Pull cord trolley release.

Safety

Personal	Push button stop in **UP and DOWN** direction. Automatic safety reverse in both **UP and DOWN** direction.
Electronic	Automatic force adjustment
Electrical	Transformer overload protector and low voltage push button wiring.
Limit Device	Optical RPM/Passpoint detector.
Limit Adjustment	Electronic, Semi and Fully Automatic.
Start Circuit	Low voltage push button circuit.

Dimensions

Length (Overall)	3.2m
Headroom Required	30mm
Hanging Weight	10.5kg

Receiver

Memory Registers	12
Operating Frequency	433.92MHz

SPECIAL NOTE: Chamberlain strongly recommends that The Protector System™ be installed on all garage door openers.

CHAMBERLAIN LIMITED WARRANTY
Merlin Professional MT60
Sectional Garage Door Opener

Chamberlain Australia Pty Limited / Chamberlain New Zealand Limited (**Chamberlain**), the manufacturer of Merlin® automatic garage door openers, is committed to manufacturing and supplying high quality goods. As part of this commitment, we seek to provide reliable service and support for our goods and are pleased to provide you, the original purchaser, with this Chamberlain Limited Warranty.

We also provide the following statement as required by the Australian Consumer Law: In Australia, in addition to your rights under this Chamberlain Limited Warranty, our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Chamberlain's warranty
Chamberlain warrants to the original purchaser of the Merlin® MT60 Sectional Door Opener (Unit) that all parts of the Unit, other than remote controlled transmitters and accessories, globes and batteries, are free from defects in materials and workmanship for a period of 24 months or 5,000 cycles (opening & closing of the garage door) whichever comes first, from the date of purchase when installed in a residential premise with a residential specified garage door that is designed for the sole purpose of domestic domicile. Chamberlain warrants that remote controlled transmitters and accessories included with the Unit are free from defects in materials and workmanship for a period of 12 months from the date of purchase.

Batteries and globes are not covered under the Chamberlain Limited Warranty.

It is a condition of this Chamberlain Limited Warranty that the Unit is sold, installed and serviced by a Professional Dealer appointed by Chamberlain. A Merlin® branded garage door opener purchased over the internet and installed by a person other than a Professional Dealer will not be covered by this Chamberlain Limited Warranty.

It is also a condition of this warranty that the garage door is operable by hand and opens and closes with no more than a maximum of 20 kgs of lifting weight. Chamberlain recommends that the garage door is serviced by a garage door technician every 12 months. This garage door service fee will be at the consumer's expense.

NB: The Australian Garage Door Association directs attention to consumers to maintain your garage door in good running order it is important your door is serviced by a professional garage door technician every 12 months or earlier as conditions may require.

During the applicable Chamberlain Limited Warranty period, if you are concerned that the Unit may be defective, for prompt on-site service call the Professional Dealer that sold/installed the opener, or our service centre on the toll free number below and a Chamberlain technician will diagnose the problem and arrange for this to be rectified. Once the problem has been diagnosed, subject to your rights under the Australian Consumer Law with respect to major failures, Chamberlain or its Professional Dealer will provide you with:
1. repairs to the Unit
or
2. a replacement Unit.

Repairs and replacement parts provided under this Chamberlain Limited Warranty are provided free of charge and are warranted for the remaining portion of the original warranty period.

This Chamberlain Limited Warranty provides benefits which are in addition to your other rights and remedies as a consumer.

Exclusions
If our service centre determines that a warranty claim has been made in respect of a failure or defect arising under or out of any exclusion detailed below such that the claim is not covered under this Chamberlain Limited Warranty, we may, subject to your other rights and remedies as a consumer, charge you a fee to repair, replace and/or return the Unit to you. This Chamberlain Limited Warranty does not cover any failure of, or defect in, the Unit due to:

1 non-compliance with the instructions regarding installation, operation, maintenance and testing of the Unit or of any product with which the Unit is used;
2 any attempt by a person other than a Professional Dealer to repair, dismantle, reinstall or move the Unit to another location once it has been installed;
3 tampering, neglect, abuse, wear and tear, accident, electrical storm, excessive use or conditions other than normal domestic use;
4 problems with, or relating to, the garage door or garage door hardware, including but not limited to the door springs, door rollers, door alignment or hinges;
5 problems caused by electrical faults or replacement of batteries or light bulbs;
6 water or moisture ingress that causes corrosion or electrical malfunction;
7 corrosion caused by sea air if located near a waterway, beach etc; or
8 fitment to a commercial door or in a commercial operating application.

NB: A General Purpose Outlet (GPO) ie: power point must be supplied by the consumer as this electrical fitting does not form a part of the Unit (opener).

If this Chamberlain Limited Warranty does not apply, you may have rights available to you under the Australian Consumer Law.

Liability – Australia only
Except as set out in the Australian Consumer Law (being Schedule 2 of the Competition and Consumer Act 2010) (as amended, consolidated or replaced):
1 all other guarantees, warranties and representations in relation to the Unit or its supply are excluded to the extent that Chamberlain can lawfully exclude them; and
2 under no circumstances will Chamberlain be liable for consequential, incidental or special damages arising in connection with the use, or inability to use, the Unit, other than those which were reasonably foreseeable as liable to result from the failure.

Liability – New Zealand only
Except as set out in the Fair Trading Act 1986 and the Consumer Guarantees Act 1993 (as amended, consolidated or replaced):
1 all other guarantees, warranties and representations in relation to the Unit or its supply are excluded to the extent that Chamberlain can lawfully exclude them; and
2 under no circumstances will Chamberlain be liable for consequential, incidental or special damages arising in connection with the use, or inability to use, the Unit, other than those which were reasonably foreseeable as liable to result from the failure.

Note: We request that you retain your sales docket or invoice as proof-of-purchase and attach it to this manual to enable you to establish the date of purchase in the unlikely event of a warranty service being required. Chamberlain reserves the right to change the design and specifications of the Unit without prior notification. Some features or accessories of the Unit may not be available in certain markets or areas. Please check with your distributor.

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